

REMARKS

The Applicant appreciates the courteous and complete examination of the application by the Examiner. In view of the foregoing amendments and the following remarks, a reconsideration of the instant application is respectfully requested.

The Examiner objects to the drawings. The Applicant submits formal replacement drawing sheets in compliance with 37 CFR 1.84(p)(5).

The Examiner objects to the specification and abstract of the disclosure. The Applicant submits a substitute specification in compliance with 37 CFR 1.125 and an abstract, on a separate sheet, in compliance with MPEP § 608.01(b).

Additionally, the Examiner rejects claims 1-5 under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 1-5 have been amended in compliance with 35 U.S.C. 112.

Lastly, the Examiner rejects: claims 1 and 2 under 35 U.S.C. 103(a), as being unpatentable over Herman et al. (US20010009250A1), in view of Baird et al. (US20020149136A1); claim 3 under 35 U.S.C. 103(a), as being unpatentable over Herman et al., in view of Baird et al. and further in view of Manzi (US20030053219A1); and claims 4 and 5 under 35 U.S.C. 103(a), as being unpatentable over Herman et al., in view of Baird et al. and further in view of Moore (US 3,773,404) and in view of Engelfriet et al. (US 5,406,042).

In order to expedite the prosecution of this application, claims 1-5 have been amended. Claims 6-20 has been added to more completely cover certain aspects of the Applicant's invention. Claims 1-20 are now in this application.

Amended claim 1 is substantially different than the Herman et al. and Baird et al. references relied upon by the Examiner. Both references do not disclose or teach the providing of a cutting device having the specific components of "a laser system with pulse lamp pumping, an optical-mechanical direction and focusing system, a sample moving mechanism, a video control device, and a control and management electronic block", as stated in amended claim 1 of the present application. Additionally, both references do not disclose or teach the method of simultaneously forming a laser beam having "a density of energy on the surface of the sample that does not exceed a

threshold of destruction of a semiconductor covering on the sample." The references do disclose the process of making defects in semiconductor materials, which teaches away from the claimed method of "not exceed a threshold of destruction of a semiconductor covering". Furthermore, the claimed method is directed towards a "semiconductor covering on the sample" which is not disclosed or taught by the prior art references.

The Herman et al. reference discloses "said laser pulses having a pulse width of less than about 10 picoseconds", which is not in the claimed range of "10-100 ps" as described in amended claim 1. The Applicant understands that the Baird et al. reference discloses the overlapping of spot areas in a laser patterning process, and more specifically "increasingly overlap the previously processed segment sets as much as 60%." The Baird et al. reference does not disclose or teach the forming of overlapping defects have "a distance determined by 50% of overlapping of the defects up to double the distance between the defects". The Baird et al. reference also discloses segments being cut at fractions of the length of segment, which is not close to "double the distance between the defects" as stated in amended claim 1.

It can be appreciated that the amended claim 1 of the present application, taken as a combination, is substantially different than the prior art references and that it would not have been obvious to one skilled in the art.

Amended claim 4 further describes the provided optical-mechanical direction and focusing system as having collimating optics, a dichroic rotary mirror, and a focusing lens. These specific components of the optical-mechanical direction and focusing system are not disclosed or taught in the Herman et al., Baird et al., or the Manzi references. Additionally, amended claim 5 and new claim 6 further describes the focusing lens.

Claims 2-10 are felt to patentably distinguish over the prior art references because of their above-mentioned dependency from amended claim 1.

Moreover, the law is clear that a motivation must be provided by the prior art to make the allegedly obvious combinations of parts relied upon in making an obviousness rejection.

Our case law makes clear that the best defense against the subtle but powerful attraction of a hindsight-based obviousness analysis is rigorous application of the requirement for a showing of the teaching or motivation to combine prior art references. See, e.g., *C.R. Bard, Inc. v. M3 Sys., Inc.*, 157 F.3d 140, 1352, 48 USPQ2d 1225, 1232 (Fed. Cir. 1998). And, absent such a showing of motivation in the prior art to make the allegedly obvious combination, it can only be assumed that the applicant's disclosure has provided the motivation for making the combination of elements from the prior art, and not the prior art itself.

Combining prior art references without evidence of such a suggestion, teaching, or motivation simply takes the inventor's disclosure as a blueprint for piecing together the prior art to defeat patentability -- the essence of hindsight. See e.g., *Interconnect Planning Corp. v. Feil*, 774 F.2d 1132, 1138, 227 USPQ 543, 547 (Fed. Cir. 1985).

It is therefore submitted that the combination of individual parts taught by the various prior art references relied upon in the Office Action would not motivate one skilled in the art to arrive at the applicant's claimed invention.

Newly added independent claim 11 further describes the method cutting of transparent nonmetallic materials by including limitations from the specification. These specific limitations were added to more completely cover certain aspects of the Applicant's invention. For example, claim 11 introduces the step of "exposing said a laser beam to a two-step compression by methods of Mandelshtam-Brillion induced scattering and Light-Induced Scattering". This two-step compression limitation is not disclosed or taught by any of the prior art references.

Claims 12-16 are felt to patentably distinguish over the prior art references because of their above-mentioned dependency from claim 11.

Newly added independent claim 17 claims the cutting device as described in amended claim 1. None of the prior art references disclose or teach a cutting device having a laser system having pulse lamp pumping, an optical-mechanical direction and focusing system, a sample moving mechanism, a video control device, and a control and management electronic block.

Claims 18-20 are felt to patentably distinguish over the prior art references because of their above-mentioned dependency from claim 17.

The Applicant requests that the Examiner reconsiders his rejections of the invention in view of the well established principle that small differences in a crowded art can constitute patentable improvement. See *In re Baum*, 51 USPQ 470 (CCPA 1941) and *In re Lange*, 126 USPQ 365 (CCPA 1960). In considering this principle, the Applicant would also request that the Examiner take note to the court decision which notes that "apparent simplicity has been held to furnish strong argument for patentability where, as here, a need has existed for a structure of the nature disclosed and claimed. The fact that a solution to a problem is simple, or appears to be simple when viewed in retrospect, does not mean that the solution was obvious when it was conceived." See *Ellipse corp. v. Ford Motor Co.*, 171 USPQ 513.

With the above amendments being fully responsive to all outstanding rejections and formal requirements, it is respectfully submitted that the claims are now in condition for allowance, and a notice to that effect is earnestly solicited. Should the Examiner feel that there are further issues which might be resolved by means of telephone interview, the Examiner is cordially invited to telephone the undersigned at (403) 444-5695, or email at davidguerra@verizon.net.

A one month extension of time fee of \$60.00 is provided.

Respectfully Submitted,

A handwritten signature in dark ink, reading "David A. Guerra". The signature is written in a cursive, flowing style. The first name "David" is prominent, followed by a middle initial "A." and the last name "Guerra".

David A. Guerra, Reg. 46,443

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On (Date) August 31, 2006 by David A. Guerra 